

Preliminary Product Information



BVM-1300

PROFESSIONAL COLOUR MONITOR

The BVM-1300 is a 13 inch (33 cm) professional colour monitor of outstanding performance and reliability.

FEATURES

High resolution Trinitron picture tube
Variable aperture correction
Vertical and horizontal sync delay for pulse cross display
Switchable fast/slow response of horizontal AFC scan circuitry
7 Segment LED on-air tally provides pre-set numeric designation of picture source
Two composite coded video inputs, plus R,G,B inputs
Built-in cross hatch generator

SPECIFICATIONS

SYSTEM		625-line, 50 field	PICTURE PERFORMANCE		
INPUTS PERFORMANCE			Height	182 mm	
Connectors	BNCs		Width	239 mm	
r.g.b. inputs	0.7 Vp-p non-composite or 1 Vp-p composite video signal ± 6 dB, loop through, high impedance.		Underscan	Approximately 10% reduction	
Return loss	At least 46 dB to 5MHz.		Linearity	Within a central area bounded by a circle whose diameter equals the picture height, within 1% of the picture height.	
Maximum safe input DC	± 5 volts		Colour temperature	6500 degrees K, adjustable to other standards.	
Hum rejection	Hum is at least 50 dB down and maximum hum is less than 4 Vrms, where hum is applied to the monitor in floating ground mode.		Normal chromaticity co-ordinates	X	Y
				Red	0.640
				Green	0.285
				Blue	0.147
					0.06
RGB PERFORMANCE			Convergence error	Less than ± 1 mm within the central area.	
Differential gain	Within 5% for a luminance from zero to 30 FL			Outside of the central area, less than ± 2 mm	
Differential phase	Within 5 degrees for a luminance from zero to 30 FL		Calibrated contrast	30 FL at peak white of standard 1 Vp-p signal.	
Frequency response	100 Hz to 8 MHz ± 1 dB		Raster size stability	Less than 1% picture height, zero to 100 APL at 30 FL peak luminance.	
DC restoration	Back porch type Back porch level within 1% of peak luminance from 10% to 90% APL		Scan delay		
			Horizontal delay	Approximately 1/4 line	
			Vertical delay	Approximately one half field, vertical scan is expanded unless underscan is activated.	
SYNCHRONIZATION			Resolution	Minimum 400 TV lines centre at 30 FL luminance.	
Interlace	More than 90%		PAL/SECAM PERFORMANCE		
AFC Slow	Weighting factor is more than 5 from 2 Hz to 100 Hz.		Luminance channel		
Fast	Weighting factor is less than:- 1 to 2 Hz 2 to 10 Hz 3 to 500 Hz 4 to 10 kHz		Differential gain	Within 5% for a luminance from zero to 30 FL	
Line pull range/ Line hold range	More than ± 500 Hz at fast time constant		Differential phase	Within 5 degrees for a luminance from zero to 30 FL	
Vertical retrace time			Frequency response	Monochrome mode. 100 Hz to 6.5 MHz ± 1 dB (aperture correction at zero)	
Normal	Within 1 ms		Colour mode	Notch filter removes frequency in region of 4.43 MHz PAL, 4.406 MHz and 4.25 MHz SECAM.	
Underscan	Within 0.8 ms		Chrominance channel (PAL)		
Horizontal retrace time	Within 10 us		Demodulation axis U,V		

Bandwidth	1.3 MHz (simple and delay modes)
Subcarrier regeneration	± 1 degree (standard input signal)
Chroma control range	More than ± 6 dB Preset at zero dB
Chrominance channel (SECAM)	
HF de-emphasis	Within ± 0.5 dB of deviation curve, 3.9 - 4.75 MHz Drift of 4.286 MHz, within 20 kHz.
HF limiting	More than 40 dB
Linearity	Within 3% to ± 350 kHz deviation at 4.406 MHz and 4.250 MHz
Demodulator stability	Within ± 500 Hz
Bandwidth	1.3 MHz
Chroma control range	More than ± 6 dB Preset at 0 dB
Chrominance/luminance	
Time error	Less than 30 ns
Gain error	Less than 5%
Aperture correction	A continuously adjustable front panel control provides up to 8 dB boost at 4.5 MHz
DC restoration	Back porch type Back porch level within 1% of peak luminance from 10% to 90% APL.

GENERAL

Power input	100/120/220/240v $\pm 10\%$
Power consumption	125w typical 150w max
Operating ambient temperature	0 - 40°C
Satisfied specification operating temperature	20 - 30°C
Humidity	0 - 90% (non-condensing)
Altitude	10,000 ft
Warm up time to meet specification	30 min
Weight	26 kg
Dimensions	424 mm wide 276 mm height 454 mm depth (545 mm including power and remote cable connectors) Rack mounting kit available

Design and specification may be subject to change without notice

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